ABSTRACT

An angular velocity sensor has two masses which are laterally disposed in an X-Y plane and indirectly connected to a frame. The two masses are linked together by a linkage such that they necessarily move in opposite directions along Z. Angular velocity of the sensor about the Y axis can be sensed by driving the two masses into Z-directed antiphase oscillation and measuring the angular oscillation amplitude thereby imparted to the frame.

In a preferred embodiment, the angular velocity sensor is fabricated from a bulk MEMS gyroscope wafer, a cap wafer and a reference wafer. In a further preferred embodiment, this assembly of wafers provides a hermetic barrier between the masses and an ambient environment.